DETAILED ACTION

Response to Amendment

1. Applicant's amendments filed on April 29, 2008 have been received and entered. Claims 1-8 and 10-21 are currently pending.

Claim Objections

2. The objection to claim 10 has been withdrawn in light of the correction made by the Applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 1, 2, 7, 13, 14, 15, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swift et al (US 2002/0122585 A1), hereinafter referred to as Swift 1, and Swift et al. (US 6556236), hereinafter referred to as Swift 2.

Regarding claim 1 and claim 16, Swift 1 discloses a method for converting an input image having a first format to an output image having a second stereoscopic format, wherein the input image and the output image are each defined by a plurality of pixels, comprising:

receiving the input image (Swift 1, Fig. 14, num. 1302, "Database of 3D Stereo Content to Download"; Swift 1, "download larger sized 3D stereoscopic content files", paragraph 20);

converting each pixel of the input image to a corresponding pixel for the output image, thereby creating the output image (Swift 1, "monoscopic and stereoscopic viewing that allows greater distribution since both types can be viewed within one system; save and conversion of one format into another from the Internet using a local drive from the original source," paragraph 27; Swift 1, paragraph 52);

formatting the output image (recombined scaled left and right media, Swift 1, figure 6, numeral 508, paragraph 0041); and

displaying the formatted output image (Swift 1, "displays it on the user side according to the user's display preferences," paragraph 52).

wherein a stereoscopic format is an assignment of pixels (Swift 1, paragraph 32, "pixel move", to respective left and right images, (Swift 1, "right and left images" paragraph 32) thus making the left and right images available at a display screen (Swift 1, first sentence, paragraph 33), to the eyes of an observer, as an image with binocular stereopsis (Swift 1, last sentence, paragraph 55).

Swift 1 does not explicitly disclose using a map to set forth a predefined relationship between the first format and the second stereoscopic format.

Swift 2 teaches using a map to set forth a predefined relationship between the first format and the second stereoscopic format (Swift 2; Fig. 4B).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Swift 1 to include the map setting forth a predefined relationship between the first format and the second stereoscopic format as taught by Swift 2 because, advantageously, the output values "can be evaluated in a massively parallel manner" (Swift 2, column 16, lines 43-44).

Regarding claim 2 and 17, the combination of Swift 1 and Swift 2 discloses a method according to Claim 1, wherein the converting step includes creating the map as a matrix that sets forth predefined relationships between one type of format as an input image and another type of stereoscopic format as an output image (Swift 2, Fig. 4C; Swift 2, Fig. 5A)

Regarding claim 7, the combination of Swift 1 and Swift 2 discloses the method of claim 1, wherein the input image is a planar image, further comprising creating a stereo image pair from the planar image (Swift 1, paragraph 46, first sentence; Swift 1, "converting a 2D object movie to a 3D stereoscopic object movie", paragraph 30).

Regarding claim 13, Swift 1 discloses a device for converting an input image having a first format to an output image having a second stereoscopic format (Swift 1, Fig. 1), wherein the input image and the output image are each defined by a plurality of pixels (Swift 1, paragraph 32, last sentence) and using a processor (Swift 1, paragraph 73) configured to identify the first format of the input image and convert the input image to an output image having the second stereoscopic format (Swift 1, paragraph 52, first sentence; Swift, paragraph 3; Swift, paragraph 27, first sentence; Swift, Fig. 1).

Swift 2 teaches comprising a software-enabled (Swift 2, "The object mappings mmcr and mmcl can be either physical optical imaging mappings or virtual geometric mappings implemented with software or hardware", column 10, lines 51-54) matrix that sets forth predefined relationships between one format for image input and a different format for image output (Swift 2, column 16, line 48-50, Swift 2, column 16, lines 45-48), wherein the different format is a stereoscopic format and convert the input image using the software-enabled matrix to an output image having the second stereoscopic format (Swift 2, column 17, line 12-13) and convert the input image using the software-enabled matrix to an output image having the second stereoscopic format (Swift 2, Fig. 4C; Swift 2, Fig. 5A)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Swift 1 to include the map setting forth a predefined relationship between the first format and the second stereoscopic format as taught by Swift 2 because, advantageously, the output values "can be evaluated in a massively parallel manner" (Swift 2, column 16, lines 43-44).

Regarding claim 14, the combination of Swift 1 and Swift 2 discloses a device according to claim 13, wherein the software-enabled matrix contains for each type of image format a pre-defined correspondence between a pixel from the input image and a pixel for the output image (Swift 2, column 17, line 12-13; Swift 2, column 17, line 30-31).

Regarding claim 15, the combination of Swift 1 and Swift 2 discloses the method of claim 1, wherein the first format is planar (Swift 1, "converting a 2D object movie to a 3D stereoscopic object movie", paragraph 30).

4. Claims 3-6, 8-12 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Swift et al (US 2002/0122585 A1) and Swift et al. (US 6556236), further in view of Loveridge et al (US 5,982,941).

Regarding claims 3-6, while the combination of Swift 1 and Swift 2 discloses a method according to Claim 1, the combination of Swift 1 and Swift 2 does not disclose converting the color space of the input image; scaling the input image; creating additional views as needed; swapping views; preparing a presentation of the output image for a particular format type; centering the presentation; formatting the presentation thereby creating a formatted output image; displaying the formatted output image; inverting the input image after the scaling step and before the creating; aligning the views after the creating step and before the swapping step; and arranging a predefined view wherein a single frame contains nine vies, then interzigging the views after the swapping step and before the preparing step.

Loveridge teaches converting the color space of the input image (Loveridge, figure 3, numeral 118); scaling the input image (Loveridge, figure 3, numeral 120); creating additional views as needed (Loveridge, figure 3, numeral 122); swapping views (Loveridge, figure 3, numeral 122, 124); preparing a presentation of the output image for a particular format type (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); centering the presentation (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); formatting the presentation thereby creating a formatted output image (Loveridge, figure 3, numeral 128); displaying the formatted output image (Loveridge, figure 3, numeral 82); inverting the input image after the scaling step and before the creating step (Loveridge, column 6, lines 9-67); aligning the views after the creating step and before the swapping

step (Loveridge, column 6, lines 9-67) and arranging a predefined view wherein a single frame contains nine vies, then interzigging the views after the swapping step and before the preparing step (Loveridge, column 6, lines 9-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Swift 1 and Swift 2's converting step to include Loveridge's method steps in order "to achieve improved performance characteristics, such as reduced noise, improved sharpness" as discussed in the Loveridge reference at col. 3, lines 61-67.

Regarding claim 8, while the combination of Swift 1 and Swift 2 discloses a method according to Claim 7, the combination of Swift 1 and Swift 2 does not disclose scaling the planar image by a fixed percentage to create a scaled image; copying the scaled image to create a complimentary image; shifting the complimentary image by a smaller percentage of the fixed percentage; extracting a centered image from the scaled image; and extracting a centered image from the shifted complimentary image.

Loveridge teaches scaling the planar image by a fixed percentage to create a scaled image (Loveridge, figure 3, numeral 120); copying the scaled image to create a complimentary image (Loveridge, figure 3, numeral 122); shifting the complimentary image by a smaller percentage of the fixed percentage (Loveridge, column 6, lines 9-67); extracting a centered image from the scaled

image (Loveridge, figure 3, numeral 124); and extracting a centered image from the shifted complimentary image (Loveridge, column 6, lines 9-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Swift 1 and Swift 2's creating step to include Loveridge's method steps in order "to achieve improved performance characteristics, such as reduced noise, improved sharpness" as discussed in the Loveridge reference at col. 3, lines 61-67.

Regarding claim 10, while the combination of Swift 1, Swift 2, and Loveridge discloses shifting the complimentary image by a smaller percentage of the fixed percentage, the combination of Swift 1, Swift 2, and Loveridge does not disclose expressly that the smaller percentage is half.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize a smaller percentage that is half. Applicant has not disclosed that the smaller percentage being half provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the smaller percentage taught by Loveridge or the smaller percentage being half because both percentage perform the same function of reducing the complimentary image for display purposes.

Therefore, it would have been obvious to one of ordinary skill in this art to modify Loveridge to obtain the invention as specified in claim 10.

Regarding claim 11, the method claim is rejected under the same combinations, teachings, and motivation as claim 8.

Regarding claim 12, the method claim is rejected under the same combinations, teachings, and motivation as claim 10.

Regarding claim 18-21, while the combination of Swift 1 and Swift 2 discloses a method according to Claim 16, the combination of Swift 1 and Swift 2 does not disclose converting the color space of the input image; scaling the input image; creating additional views as needed; swapping views; preparing a presentation of the output image for a particular format type; centering the presentation; formatting the presentation thereby creating a formatted output image; displaying the formatted output image; inverting the input image after the scaling step and before the creating; aligning the views after the creating step and before the swapping step; and arranging a predefined view wherein a single frame contains nine views, then interzigging the views after the swapping step and before the preparing step.

Loveridge teaches converting the color space of the input image (Loveridge, figure 3, numeral 118); scaling the input image (Loveridge, figure 3, numeral 120); creating additional views as needed (Loveridge, figure 3, numeral 122); swapping views (Loveridge, figure 3, numeral 122, 124); preparing a presentation of the output image for a particular format type (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); centering the presentation (Loveridge, figure 3, numeral 122, 124, column 6, lines 5-67); formatting the presentation thereby creating a formatted output image (Loveridge, figure 3, numeral 128); displaying the formatted output image (Loveridge, figure 3, numeral 82); inverting the input image after the scaling step and before the creating step (Loveridge, column 6, lines 9-67); aligning the views after the creating step and before the swapping step (Loveridge, column 6, lines 9-67) and arranging a predefined view wherein a single frame contains nine vies, then interzigging the views after the swapping step and before the preparing step (Loveridge, column 6, lines 9-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Swift 1 and Swift 2's converting step to include Loveridge's method steps in order "to achieve improved performance characteristics, such as reduced noise, improved sharpness" as discussed in the Loveridge reference at col. 3, lines 61-67.

Response to Arguments

5. Applicant's arguments with respect to claims 1-8, 10-14 have been considered but are moot in view of the new ground(s) of rejection.

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELISA M. RICE whose telephone number is (571)270-1582. The examiner can normally be reached on 8:00a.m.-5:30p.m. EST Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on (571)272-7401. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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